Data Storage and Retrieval Systems and Related Methods of Storing and Retrieving Data

5   **Abstract of the Disclosure**

Data storage and retrieval systems and related methods are disclosed herein. In one

aspect, a system includes data processing servers configured to receive incoming data and

transmit the data for storage. The system also includes data storage servers each coupled to one

or more data storage units and configured to receive transmitted data for writing to the one or

10   more data storage units, and to read data from the one or more data storage units. Furthermore,

the systems may include data retrieval servers coupled to one or more of the data storage servers

and configured to retrieve data from the one or more data storage units. The system further

includes process modules each associated with one of the data storage servers, where at least two

of the process modules are configured to write a portion of the data to corresponding data storage

15   units. In addition, each of the process modules are configured to transmit an acknowledgment

associated with each of the corresponding at least two data storage units upon the writing of the

data portion in the at least two data storage units. Furthermore, some embodiments may include

a key manager coupled to the data processing servers and configured to receive keys that indicate

the location of the data portions in the one or more data storage units. Additionally, each data

20   retrieval server may be coupled to the key manager and employ the keys to retrieve data from the

one or more data storage units.